Money, the interest rate, and output: analysis and policy implications

Econ 202 Lecture 9

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Outline

1. Monetary effects on the real side of the economy
2. Goods market effects on monetary markets
3. Macroeconomic Policy Mix

The links in macroeconomics: an intro

The goods market and the money market do not operate independently. Events in one affect the other, and vice versa. Purpose of this class is to understand HOW.

The goods market and the money market do not operate independently. Events in one affect the other, and vice versa. Purpose of this class is to understand HOW. Two key links at work:

1. Income (GDP, Y) affects the demand for money (M_d), and M_d affects the interest rate
2. M_d and M_s affect the interest rate (r), and r affects investment (I) and consumption (C)

M_d effects. Two possibilities:

1. $M_d \uparrow \rightarrow r \uparrow \rightarrow I/C \downarrow \rightarrow Y \downarrow$

Monetary effects on the real side of the economy

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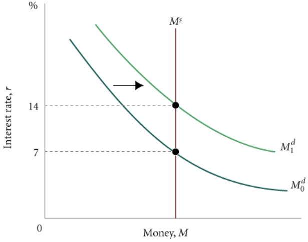

M_s effects. Two possibilities:

1. $M_s \downarrow \rightarrow r \uparrow \rightarrow I/C \downarrow \rightarrow Y \downarrow$
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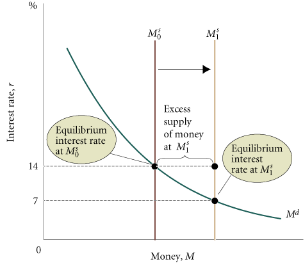

Real-side (Goods market) effects on monetary markets

Y effects. Two possibilities:

1. $Y \uparrow \rightarrow M_d \uparrow \rightarrow r \uparrow$

Real-side (Goods market) effects on monetary markets

Y effects. Two possibilities:

1. $Y \uparrow \rightarrow M_d \uparrow \rightarrow r \uparrow$
2. $Y \downarrow \rightarrow M_d \downarrow \rightarrow r \downarrow$

Combining theory and policy

Expansionary fiscal policy

An increase in government spending (G) or a reduction in net taxes (T) aimed at increasing aggregate output (income) (Y).

1. $G \uparrow \rightarrow Y \uparrow \rightarrow M_d \uparrow \rightarrow r \uparrow \rightarrow I \downarrow$ (*crowding-out effect*)
2. $T \downarrow \rightarrow Y \uparrow \rightarrow M_d \uparrow \rightarrow r \uparrow \rightarrow I \downarrow$

Expansionary monetary policy

Increase in the money supply aimed at increasing aggregate output (income) (Y).

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Expansionary monetary policy

Increase in the money supply aimed at increasing aggregate output (income) (Y).

1. $M_s \uparrow \rightarrow r \downarrow \rightarrow I/C \uparrow \rightarrow Y \uparrow$ but also $Y \uparrow \rightarrow M_d \uparrow \rightarrow r \uparrow \rightarrow I \downarrow$

Macroeconomic Policy Mix

Policy mix

The combination of fiscal and monetary policy being used at a given time

FISCAL POLICY

		Expansionary ($\uparrow G$ or $\downarrow T$)	Contractionary ($\downarrow G$ or $\uparrow T$)
Monetary Policy	Expansionary ($\uparrow M^S$)	$Y\uparrow, r?, I?, C\uparrow$	$Y?, r\downarrow, I\uparrow, C?$
	Contractionary ($\downarrow M^S$)	$Y?, r\uparrow, I\downarrow, C?$	$Y\downarrow, r?, I?, C\downarrow$

Key:

$\uparrow$: Variable increases.

$\downarrow$: Variable decreases.

?: Forces push the variable in different directions. Without additional information, we cannot specify which way the variable moves.

Expansionary Policy in Action

Major recession episodes and counter-actions

1. 1974-75. Cause: oil shocks.
   - tax cuts to stimulate consumption and investment
   - money supply increase to reduce interest rates
2. 1980-82. Cause: contractionary monetary policy.
   - increase money supply to stimulate Agg. Demand
   - tax cuts
3. 2001. Cause: dot-com burst.
   - reduce interest rates
   - increased G spending
4. 2008-2009. Cause: mortgage crisis.
   - major reduction in interest rates
   - tax cuts, increased G spending